IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Karola Richter et al.

JC20 Rec'd PCT/PTO 1 4 OCT 2003

Serial No: Filing Date:

Title:

SILIICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES

WITH A DEFINED SLOPE, ANGLE, AND PRODUCTION METHOD

Examiner:

Art Unit:

October 12, 2005

HMP201\$1

INFORMATION DISCLOSURE STATEMENT **UNDER 37 CFR § 1.97.**

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

SIR:

Applicants are respectfully submitting a copy of International Search Report dated November 17, 2004 and PCT SCHRIFTLICHER BESCHEID DER INTERNATIONALEN RECHERCHENBEHÖRDE issued by European Patent Office Berlin and copies of patent documents cited in the International Search Report of the instant application.

The following is a listing of the references in question.

- US 6 198 150
- US 6 180 466
- DE 197 36 370
- EP 0 822 582
- DE 42 41 045
- VOLLAND et al., Dry etching with gas chopping without rippled sidewalls, Journal of Vacuum Science & Technology, November 1999

Applicants are respectfully submitting a form PTO-1449 with all references listed therein and including citation in the application Rec of PCT/PTO 1 4 OCT 2000

The above recited references taken alone or in combination are believed neither to anticipate or to render obvious the present application.

Consideration of the reference document during the examination of the present application is respectfully requested.

Respectfully submitted, Karola Richter et al.

Him M Kanur

By:

Horst M. Kasper, their attorney, 13 Forest Drive, Warren, N.J. 07059 Tel.:(908)526-1717 Fax:(908)526-6977

Reg. No. 28,559; Docket No.: HMP201

/sn-

JC20 Rec'd FCT/FTO 1 4 OCT 2001

PTO/SB/08 (2-92)

72 2000	4 4 4 4			_						Docket Number (Optional		A STATE OF THE	E 2	770		
Form PTO					.	_	~~ ·	0.07 	0. m. 1 m. 0	HMP201						
INF								OSURE (CITATION —	Applicant RICHTER at al.						
								essary)		Filing Date	Group Art Unit					
	- i -		_						U.S. PATENT	DOCUMENTS	<u></u>					
EXAMINER INITIAL	DX	T T T							1	IAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE			
200	6	1	9	X	/	3	d	03/08/01	GEL	ZINIS	HOIL	29/00				
	1/2	1	Ý	0	-	$\overline{}$	-	01/30/01	IBOK		HOIL	1 /.				
	10	۲	0	۲		4		77701	1002		11010	121/10	-			
	+	Н		-	H	1	+				+	-				
	+-	\vdash	Н	_	H	\dashv	+				<u> </u>		<u> </u>			
		Ц			Ц	4	4				ļ·					
		Ц					\perp									
						1				· .						
	1	П				1	\dagger	·								
	╅	Н	\dashv		\dashv	1	+									
			Ļ				ᆚ		<u>l</u>			11				
	<u> </u>									TO RITH IN A COT IN A CORNING						
	T ₀₀₀	UM	ENT	NU	MRF	P	1		· · · · · · · · · · · · · · · · · · ·	ENT DOCUMENTS	T	SIRCIASS	Transla	tion		
	╂┯	_	_	_	_	_		DATE		COUNTRY	CLASS	SUBCLASS -	Trensla YES	tion NO		
	9	_	_	_	_	_	00		GERM	COUNTRY 4 N Y	CLASS HOIL	21/365	_			
	9 4	7	3	6	3 7	16	509	DATE 17/04/99 15/26/94		COUNTRY 4 N Y	CLASS	 	_			
	9 4	_	3	6	_	16	509	DATE	GERM	COUNTRY 4 N Y	CLASS HOIL	21/365	_			
	9 4	7	3	6	3 7	16	509	DATE 17/04/99 15/26/94	GERM GERM	COUNTRY 4 N Y	CLASS HOIL (27F	21/365	_			
	9 4	7	3	6	3 7	16	509	DATE 17/04/99 15/26/94	GERM GERM	COUNTRY 4 N Y	CLASS HOIL (27F	21/365	_			
	9 4	7 2 8	3.4	6	5 8	76	5 05	DATE 17/04/99 1/04/94 17/04/98	GERMA GERM EPO OTHER DOCUM	COUNTRY ANY ANY IENTS (Including Au	CLASS HOIL CZ7F HOIL thor, Title, Da	21/3965 14/00 21/306	YES	NO		
	9 4	7 2 8	3.4	6	5 8	76	5 05	DATE 17/04/99 1/04/94 17/04/98	GERMA GERM EPO OTHER DOCUM	COUNTRY ANY ANY IENTS (Including Au	CLASS HOIL CZ7F HOIL thor, Title, Da	21/3965 14/00 21/306	YES	NO		
	9 4 0	7 2 8.	3 kg	2	3 1 5 2 A	1 d 1 d 1	7 0s	DATE 77/04/99 5/26/94 2/04/38 5/04/38	GERMA GERMA EPO OTHER DOCUM tal: 11 Dry ed Sidew	ANY ANY IENTS (Including Au etching with	HOIL (27F HOIL thor, Title, Das URNA	21/3965 14/00 21/306 te, Pertinent Page (40 pp	es, Etc.)	NO		
	9 4 0	7 2 8.	3 kg	2	3 1 5 2 A	1 d 1 d 1	7 0s	DATE 77/04/99 5/26/94 2/04/38 5/04/38	GERMA GERMA EPO OTHER DOCUM tal: 11 Dry ed Sidew	ANY ANY IENTS (Including Au etching with	HOIL (27F HOIL thor, Title, Das URNA	21/3965 14/00 21/306 te, Pertinent Page (40 pp	es, Etc.)	NO		
	9 4 0	7 2 8.	3 kg	2	3 1 5 2 A	1 d 1 d 1	7 0s	DATE 77/04/99 5/26/94 2/04/38 5/04/38	GERMA GERMA EPO OTHER DOCUM tal: 11 Dry ed Sidew	ANY ANY IENTS (Including Au etching with	HOIL (27F HOIL thor, Title, Das URNA	21/3965 14/00 21/306 te, Pertinent Page (40 pp	es, Etc.)	NO		
	9 4 0	7 2 8. V N S (A)	3 4 2 1 Nit	SI 2 LILLE D	3 1 0 4 5 8 N	No Colo	503 20 1/A	126/94 126/94 12/04/38 12/04/38	GERMA GERMA GERMA EPO OTHER DOCUM tal: II Dry ed Sidew ECHNOLO ETER ST	IENTS (Including Au etching with alls " To by B' HIC	HOIL (27F HOIL thor, Title, Da "H 9as URNA "ROEL" VOI	21/3965 14/00 21/306 21/306 te, Pertinent Page Chopp LOF 1 ECTRON	es, Esc.) ing IAC	мо 		
	9 4 0	7 2 8. V N S (A)	3 4 2 1 Nit	SI 2 LILLE D	3 1 0 4 5 8 N	No Colo	503 20 1/A	126/94 126/94 12/04/38 12/04/38	GERMA GERMA GERMA EPO OTHER DOCUM tal: II Dry ed Sidew ECHNOLO ETER ST	ANY ANY IENTS (Including Au etching with	HOIL (27F HOIL thor, Title, Da "H 9as URNA "ROEL" VOI	21/3965 14/00 21/306 21/306 te, Pertinent Page Chopp LOF 1 ECTRON	es, Esc.) ing IAC	мо 		
EXAMINER	9 4 0	7 2 8. V N S (A)	3 4 2 1 Nit	SI 2 LILLE D	3 1 0 4 5 8 N	No Colo	503 20 1/A	126/94 126/94 12/04/38 12/04/38	GERMA GERMA EPO OTHER DOCUM FOLLOW ECHNOLOW ETER ST	IENTS (Including Au etching with alls 4: 10: EUCTURES PAGES	HOIL (27F HOIL thor, Title, Da "H 9as URNA "ROEL" VOI	21/3965 14/00 21/306 21/306 te, Pertinent Page Chopp LOF 1 ECTRON	es, Esc.) ing IAC	мо 		
EXAMINER	9 4 0	7 2 8. V N S (A)	3 4 2 1 Nit	SI 2 LILLE D	3 1 0 4 5 8 N	No Colo	503 20 1/A	DATE 17/99 5/26/94 5/26/98 5	GERMA GERMA EPO OTHER DOCUM FOLLOW ECHNOLOW ETER ST	IENTS (Including Au etching with alls " To by B' HIC	HOIL (27F HOIL thor, Title, Da "H 9as URNA "ROEL" VOI	21/3965 14/00 21/306 21/306 te, Pertinent Page Chopp LOF 1 ECTRON	es, Esc.) ing IAC	мо 		
	9 4 0	7 2 8. V W S (A)	3 /4 /2 /2 /2 /2 /2 /2 /2 /2 /2 /2 /2 /2 /2	SI 2 LIHED L	3 1 0 4 5 2 N N N	ALC CJI	500 20 1/A E A)	DATE 17 ,	GERMA GERMA EPO OTHER DOCUM FOLLOW ECHNOLO EFER ST ISSUE	IENTS (Including Au etching with alls 4: 10: EUCTURES PAGES	thor, Title, Da	21/3965 14/00 21/306 te, Pertinent Page Chopp LOF 1 ECTRON 1EMBER 768—	es, Esc.) ING INCS 2 19	мо 		

JC20 Rec'd PCT/PTO 1 4 OCT 2005

PTO/SB/08 (2-92)
Sheet __Z___or____

Form PTO-									Docket Number (Optional HMP ZC	201953728					
INF							CLOSURE CATION	CITATION		41FBR et al					
							necessary)		Filing Date Group Art Unit						
								U.S. PATENT	DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER						DATE		NAME	CLASS	SUBCLASS	SUBCLASS FILING D.			
					П	П									
	 														
	1				П	\sqcap	1								
	1	T	П		П						1		·		
-	十				H	十						 	·		
· 	+	\vdash	Н		H	+	1								
	+	T	Н		H	+					 				
	1	Н			H	+	 				 				
	+-		H		H	+	+	<u> </u>				 			
	+	\vdash	H	-	Н	+	-	_							
						+		<u> </u>	· · · · · · · · · · · · · · · · · · ·						
	-	L	Ш		Ш			EODEICN DAT	TENT DOCUMENTS	l	<u>.l.</u>	<u> </u>			
	ВОО	CUM	ENT	טאי	ЛМВІ	ER	DATE	FOREIGN PA	COUNTRY	CLASS	SUBCLASS Translation				
	 	٦	Т	;	_	Т			COUNTRI	42.00	5050225	YES	NO		
·		+	+	\dashv	+	十	 					•			
	H	\dashv	+	╣	+	+	 								
	\sqcup	4	\downarrow	4	4	4	ļ	 							
· · · · · · · · · · · · · · · · · · ·		4	4	_	\downarrow	\downarrow	<u> </u>								
					丄	上	<u> </u>	<u> </u>							
	Т	٠,	ଡ		-01	(1 .		OTHER DOCUM							
									OLHEM SOC. VOL. 140 NO.9 (1993)						
	-						2 - 2		ECTOOUTH S	~	1/0/ 12-	7 11 11			
1	\dashv	<u>H.</u>		ح/ د	= 1		Leta	J. EL	ECIROCHENS	sa,	VUL.13/	Noll	/		
	_	No	V	er	n l	2C	r 1990	pp 36	12-3632	-					
		B	,	k	<u> </u>	٢	1 et al	1.; J. EL	ECTROCHEMS 12-3632 ECTROCHEM	500.	VOL. 14	<u> </u>	107		
		Jι	ιl	7	_/	19	98, p	p 2498-	2508			_			
EXAMINER									DATE CONSIDERED						
· · · · · · · · · · · · · · · · · · ·															
EXAMINER: citation if not i	Initia n con	lorı,	cita nan	atio ice	n c	onsi I not	dered, wheth considered.	ner or not citation is Include copy of this	in conformance with MPE form with next communication	P§ 609. Di	raw line throu applicant.	gh			

·														Sheet 7	5 3 3 5		
Form PTO	-	-									HMP 201 301300						
INFO	ORN							DSURE CATION		ПОП	Appent .						
	/\	•		•••				eccay)	-		Floring Dute Group Art Units						
	<u> </u>								U.	S. PAT	ENT DO	CUMENTS					
EXAMINER INSTIAL	٥	DOCUMENT HUMBER DATE								***************************************	MME		CLASS	BUTCLASS	RUNG DATE FAPPROPRIATE		
									1								
	1	Ť					1		†								
	+	-	-				+		 	, <u>, , , </u>		÷					
	+-	÷	-	_		-	+		 				<u> </u>				
	- -	+	_				4					 	-	ļ			
	<u> </u>							•	<u> -</u>								
							· ·	•	FORE	IGN PA	TENT D	OCUMENT:	5				
	œ	XVI	Đ	TH	, M.E.	ER		DATE	<u> </u>	φ	UNTRY		ans	BURGASS	YES	MO Rote	
· · · · · ·	T				1	T	T										
	1	П			1	7	†										
	1				†	\dagger	†		 								
	+-	H	-	+	+	+	╀		 				<u> </u>				
	-	H	\dashv	4	4	+	╀						ļ				
· · · · · · · · · · · · · · · · · · ·			4		4	4	+		 			·					
	-	-	4		4	4	1		 			<u> </u>					
			_		4	1	1		ļ <u></u>								
														}			
		П			T	T	T					· · · · ·					
			٦		1	†	T										
	-1								OTHE	R DOC	UMENTS	(Including Au	thor, This D	ne. Perinari	Paget Fit	<u>-</u>	
		H.	V.	B	e De	in	9,	FUN				PLASMA					
												e of Pla					
		,															
	J.W. RANGELOW et al; J. VAC. SCI. TECHNOL, B13(6) NOV/Dec 1995, PP 2394-2399 K.M. CHANG et al; JOURNAL OF APPLIED PHYSICS												17(0)				
		1	7	/ /	4			HAN	16/	+01	- 117 · TNI	IPNAL	OK DF	PILEN	DHN 10	21/15	
	\square	<u> </u>	F	Ξρ	7	- /	<u> </u>	199	6	101	80	Issue S	- 00	3048	- 30	/L3/	
EXAMPLER	اا		_					- / J	" /		DATE COM	DERED	1 //	JU 10			
EXAMINER	: Ini	iel	ií c	iui	ioo	1 00	nsi	dered, wi	hether or	not cita	tion is in co	nformance wit	h MPEP (609; Draw 1	ine throu	ıgh	
	. щ С	-mil	ωī	u En	œ		DO	и соотору	160' IDC	moc cop	y of this for	m with next or	minumicat.	ion to the ap	plicant		